FILE 'HOME' ENTERED AT 12:32:06 ON 03 JUN 2003

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:32:15 ON 03 JUN 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 1 JUN 2003 HIGHEST RN 523977-56-2 DICTIONARY FILE UPDATES: 1 JUN 2003 HIGHEST RN 523977-56-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> Uploading 09975136 before allowance.str

L1 STRUCTURE UPLOADED

=> id l1

COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID
The query entered contains both search terms created by
structure-building or screen commands and text search terms. L#s
created via the STRUCTURE or SCREEN commands must be searched in the
structures files separately from text terms or profiles. The L#
answer sets from structure searches can be used in crossover searches
and can be combined with text terms.

=> d 11 L1 HAS NO ANSWERS L1 STR

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

G1 H, Cb, Ak

Structure attributes must be viewed using STN Express query preparation.

50 ANSWERS

=> search 11 sss sam

SAMPLE SEARCH INITIATED 12:32:49 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 208 TO ITERATE

100.0% PROCESSED 208 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 3295 TO 5025

PROJECTED ANSWERS: 1047 TO 2113

L2 50 SEA SSS SAM L1

=> d scan

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 5-hydroxy-1,3-phenylene ester,

dimethanesulfonate (salt) (9CI)

MF C22 H20 N6 O5 . 2 C H4 O3 S

CM 1

$$\begin{array}{c|c} & \text{OH} & \text{OH} \\ & \text{NH} & \text{C-OH} \\ & \text{H}_2\text{N-C-NH} \end{array}$$

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 3-[(aminoiminomethyl)amino]-, 4-[[4-

[(aminoiminomethyl)amino]benzoyl]oxy]phenyl ester (9CI)

MF C22 H20 N6 O4

$$\begin{array}{c|c} NH & NH & NH \\ \parallel & NH - C - NH_2 \\ \parallel & C - O \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-,

4-[3-(carboxymethoxy)-3-oxo-1-

propenyl]phenyl ester (9CI)

MF C19 H17 N3 O6

CI COM

$$\begin{array}{c} \text{NH} & \text{O} \\ \| \\ \text{H}_2\text{N}-\text{C}-\text{NH} & \text{O} \\ \| \\ \text{C}-\text{O} & \text{CH} = \text{CH}-\text{C}-\text{O}-\text{CH}_2-\text{CO}_2\text{H} \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 . 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[[[4-[[4-

[(aminoiminomethyl)amino]benzoyl]oxy]benzoyl]amino]acetyl]amino]ethyl}.omega.-methoxy-, monomethanesulfonate (9CI)

MF (C2 H4 O)n C20 H23 N5 O5 . C H4 O3 S

CM 1

PAGE 1-A

PAGE 1-B

$$-CH_2$$
 $-CH_2$ $-CH_$

CM 2

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 2-(5-methoxy-4-oxo-4H-3,1-benzoxazin-2-yl)phenyl ester, monomethanesulfonate (9CI)

MF C23 H18 N4 O5 . C H4 O3 S

CM 2

CM 1

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):30

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid,

2-[[2-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]benzoyl]amino]-6-chloro-, (4-methoxyphenyl)methyl ester, monomethanesulfonate (9CI) MF C30 H25 Cl N4 O6 . C H4 O3 S

CM 1

CM 2

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 4-[[4-[2-(diethylamino)-2-oxoethyl]-1-piperazinyl]carbonyl]phenyl ester (9CI)

MF C25 H32 N6 O4

CI COM

$$\begin{array}{c} NH \\ \parallel \\ H_2N-C-NH \\ \hline \\ C-O \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS
- IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 4-[[[6-oxo-6-(2-thiazolylamino)hexyl]amino]carbonyl]phenyl ester, monomethanesulfonate (9CI)
- MF C24 H26 N6 O4 S . C H4 O3 S

CM 1

CM 2

- L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS
- IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 4-[(2-methylhydrazino)carbonyl]phenyl ester, monomethanesulfonate (9CI)
- MF C16 H17 N5 O3 . C H4 O3 S

CM 2

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-.alpha.-methyl-, (S)- (9CI)

MF C17 H17 N3 O4

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS
- IN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-.alpha.-methyl-, phenylmethyl ester, (R)-, monomethanesulfonate (9CI)
- MF C24 H23 N3 O4 . C H4 O3 S

CM 1

Absolute stereochemistry.

CM 2

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-.alpha.methyl-, 2-(diethylamino)-2-oxoethyl ester, monomethanesulfonate (9CI)
MF C23 H28 N4 O5 . C H4 O3 S

CM 1

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-.alpha.-methyl-, 2-amino-2-oxoethyl ester, monomethanesulfonate (9CI)

MF C19 H20 N4 O5 . C H4 O3 S

CM 1

CM 2

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-3,5-dimethyl-, 2-(dimethylamino)ethyl ester, dihydrochloride (9CI)

MF C21 H26 N4 O4 . 2 Cl H

$$\begin{array}{c|c} & \text{NH} & \text{NH} \\ & \text{H}_2\text{N}-\text{C}-\text{NH} & \text{Me} \\ & \text{Me} & \text{C}-\text{O}-\text{CH}_2-\text{CH}_2-\text{NMe}_2 \\ & \text{O} & \text{O} \\ \end{array}$$

$$\begin{array}{c|c} & \text{NH} & \text{NH} \\ & \text{H}_2\text{N}-\text{C}-\text{NH} & \text{Me} \\ & \text{Me} & \text{C}-\text{O}-\text{CH}_2-\text{CH}_2-\text{NMe}_2 \\ & \text{O} & \text{O} \end{array}$$

●2 HCl

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 3-(trifluoromethoxy)phenyl ester, monomethanesulfonate (9CI)

MF C15 H12 F3 N3 O3 . C H4 O3 S

CM 1

$$\begin{array}{c} \text{NH} \\ \parallel \\ \text{H}_2\text{N-C-NH} \\ \hline \\ \text{C-O-CF}_3 \\ \end{array}$$

CM 2

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

MF C15 H14 C1 N3 O3 . C2 H4 O2

$$\begin{array}{c|c} & & & & \\ & & & \\ NH & & & \\ H_2N-C-NH & & & \\ & & & \\ CH_2-OH & & \\ \end{array}$$

CM 2

REGISTRY COPYRIGHT 2003 ACS L2

Benzoic acid, 4-[(aminoiminomethyl)amino]-, 2-chloro-5-IN [(methylsulfonyl)amino]phenyl ester, monoacetate (9CI) C15 H15 Cl N4 O4 S . C2 H4 O2

MF

CM 1

CM

REGISTRY COPYRIGHT 2003 ACS L2 Benzoic acid, 4-[(aminoiminomethyl)amino]-, 2,2-dimethylpropyl ester IN (9CI) C13 H19 N3 O2 MF

$$\begin{array}{c|c} \text{O} & \text{C} \\ \text{C} - \text{O} - \text{CH}_2 - \text{CMe}_3 \\ \text{H}_2 \text{N} - \text{C} - \text{NH} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN 2-Naphthalenecarboxylic acid,

6-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-

, 2-(4-morpholinyl)-2-oxoethyl ester, monomethanesulfonate (9CI)

MF C25 H24 N4 O6 . C H4 O3 S

CM 1

CM 2

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-,

2-(5-chloro-8-methoxy-4-oxo-4H-

3,1-benzoxazin-2-yl)phenyl ester, monomethanesulfonate (9CI)

MF $C23\ H17\ C1\ N4\ O5$. C H4 O3 S

CM2

REGISTRY COPYRIGHT 2003 ACS L2 50 ANSWERS

Benzoic acid, 4-[(aminoiminomethyl)amino]-, 2-(5-methoxy-4-oxo-4H-3,1-IN benzoxazin-2-yl)phenyl ester (9CI) C23 H18 N4 O5

MF

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid,
2-[[2-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]benzoyl]amino

]-6-(methoxymethyl)- (9CI)

MF C24 H22 N4 O6

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 4-[[2-[4-(1-methylethyl)-1-piperazinyl]-2-oxoethoxy]carbonyl]phenyl ester, mono(trifluoromethanesulfonate) (9CI)

MF C24 H29 N5 O5 . C H F3 O3 S

CM 1

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 4-[[(5-methyl-3-

isoxazolyl)amino]carbonyl]phenyl ester, monomethanesulfonate (9CI)

MF C19 H17 N5 O4 . C H4 O3 S

CM 1

CM' 2

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Benzoic acid, 4-[(aminoiminomethyl)amino]-,
3-(4,5-dimethoxy-2-methyl-3,6dioxo-1,4-cyclohexadien-1-yl)propyl ester (9CI)
MF C20 H23 N3 O6

$$\begin{array}{c|c} & & & \\ & & \\ NH & \\ H_2N-C-NH & \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 4-[[2-(4-methoxyphenyl)hydrazino]carbonyl]phenyl ester, monomethanesulfonate (9CI)

MF C22 H21 N5 O4 . C H4 O3 S

CM 1

$$\begin{array}{c|c}
 & O & O & NH \\
 & NH - NH - C & - NH_2
\end{array}$$

CM 2

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-.alpha.-methyl-, 2-(1,1-dimethylethoxy)-2-oxoethyl ester, (S)- (9CI)

MF C23 H27 N3 O6

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS
- IN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-.alpha.-methyl-, 2-oxo-2-[4-(phenylmethyl)-1-piperazinyl]ethyl ester (9CI)
- MF C30 H33 N5 O5
- CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS
- IN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-.alpha.methyl-, carboxymethyl ester, monomethanesulfonate (9CI)
- MF C19 H19 N3 O6 . C H4 O3 S

CM 1

- L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS
- IN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-.alpha.-methyl-, 1-methylethyl ester (9CI)
- MF C20 H23 N3 O4
- CI COM

$$\begin{array}{c|c} & \text{O} \\ & \text{NH} \\ \\ \text{H}_2\text{N-C-NH} \\ & \text{CH-C-OPr-i} \\ & \text{Me} & \text{O} \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 6-amino-2-naphthalenyl ester, dimethanesulfonate (9CI)

MF C18 H16 N4 O2 . 2 C H4 O3 S

CM 1

CM 2

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 4-[[4-(2,5-dioxo-1-pyrrolidinyl)butyl]thio]phenyl ester, monomethanesulfonate (9CI)

MF C22 H24 N4 O4 S . C H4 O3 S

PAGE 2-A

CM 2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 5-[(aminoiminomethyl)amino]-2-chlorophenyl ester, diacetate (9CI)

C15 H15 C1 N6 O2 . 2 C2 H4 O2 MF

> CM1

CM

REGISTRY COPYRIGHT 2003 ACS L2 50 ANSWERS

Benzoic acid, 4-[(aminoiminomethyl)amino]-, 4-IN

[(dipropylamino)sulfonyl]phenyl ester, monomethanesulfonate (9CI) C20 H26 N4 O4 S . C H4 O3 S

MF

CM 1

L2 50 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 4-[(1E)-3-(4-morpholinyl)-3-oxo-1-propenyl]phenyl ester (9CI)

MF C21 H22 N4 O4

CI COM

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0'O' IS NOT VALID HERE

To display more answers, enter the number of answers you would like to see. To end the display, enter "NONE", "N", "0", or "END". HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> search 11 sss full FULL SEARCH INITIATED 12:34:48 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 3885 TO ITERATE

100.0% PROCESSED 3885 ITERATIONS SEARCH TIME: 00.00.01

1258 ANSWERS

L3 1258 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 149.75 149.96

FILE 'CAPLUS' ENTERED AT 12:34:57 ON 03 JUN 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Jun 2003 VOL 138 ISS 23 FILE LAST UPDATED: 2 Jun 2003 (20030602/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

- => 13
- L4 876 L3
- => ?bact?
- L5 613320 ?BACT?
- => 14 and 15
- L6 31 L4 AND L5
- => d 16 20-31 ti
- L6 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2003 ACS
- TI Probiotics: antistaphylococcal activity of 4-aminocyclohexanecarboxylic acid, aminobenzoic acid, and their derivatives and structure-activity relations
- L6 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2003 ACS
- TI Cephalosporin compounds
- L6 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2003 ACS
- TI The protease inhibitor p-nitrophenyl-p'-guanidinobenzoate inactivates Sindbis and other enveloped viruses
- L6 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2003 ACS
- TI 6-[.alpha.-(.omega.-Guanidinoalkanoylamido)acylamido]penicillanic acids
- L6 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2003 ACS
- TI 6-[.alpha.-(.omega.-Guanidinoalkanoylamido)acylamido]penicillanic acids
- L6 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2003 ACS
- TI Influence of various proteinase inhibitors on the gelatinolytic effect of ejaculated and uterine boar spermatozoa
- L6 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2003 ACS
- TI Pharmaceutical cephalosporins
- L6 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2003 ACS
- TI Antimicrobial and hypoglycemic (2-imidazolidinylidene) and (hexahydro-2-pyrimidinylidene) guanidines
- L6 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2003 ACS
- TI Specificity and mechanism of clostripain catalysis
- L6 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2003 ACS
- TI Antibacterial quanidinoarylpenicillins

ANSWER 30 OF 31 CAPLUS COPYRIGHT 2003 ACS L6 Tuberculostatic activity of derivatives of aminoguanidine and TΙ diaminoguanidine and its correlation with chemical structure ANSWER 31 OF 31 CAPLUS COPYRIGHT 2003 ACS L6 Reaction of cyanoguanidine with aromatic amines. II. Formation of TI 1-amidino-3-(p-nitrophenyl- and p-carboxyphenyl)urea => pylori 7936 PYLORI 20 PYLORIS ь7 7949 PYLORI (PYLORI OR PYLORIS) => 14 and 17 2 L4 AND L7 => d 18 1-2 ti ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS L8 ΤI Preparation of esters of 4-guanidinyl(methyl)benzoic acid treating or preventing bacterial infection ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS rsEnzyme inhibitors for treatment of gastrointestinal disorders caused by TI Helicobacter pylori => d 18 1-2 ti fbib abs ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS Preparation of esters of 4-guanidinyl(methyl)benzoic acid treating or ΤI preventing bacterial infection 2003:282526 CAPLUS ΑN 138:304065 DN Preparation of esters of 4-guanidinyl(methyl)benzoic acid treating or TI preventing bacterial infection Zhu, Dexu; Muramatsu, Mutsumi; Xie, Jianshu; Cheng, Ni; Wang, Mingwei IN Peop. Rep. China PA PCT Int. Appl., 43 pp. SO CODEN: PIXXD2 DT Patent LΑ English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. _____ ______ WO 2001-CN1499 A1 WO 2003029201 20030410 20011023 PΙ W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

.

GI

$$\begin{array}{c}
HN \\
N \\
H_2N
\end{array}$$

$$\begin{array}{c}
H \\
CH_2 \\
-
\end{array}$$

$$\begin{array}{c}
O \\
II \\
C-OR
\end{array}$$

AB Title compds. I [n = 0-1; R = H, alkyl, aryl, biphenyl deriv.] are prepd. For instance, a suspension of 4-guanidinomethylbenzoic acid hydrochloride (prepn. given) is condensed with phenol (pyridine, DCC, 48 h) to give Ph 4-guanidinomethylbenzoate hydrochloride. Selected analogs had IC50 of >200 - 26 .mu.M on E. coli growth. Another example compd. had MIC of 0.10

- 0.48 .mu.g/mL against 9 strains of H. **pylori** at various pH. I are useful for treating or preventing disease or disorders caused by or assocd. with certain bacterial infection, esp. Escherichia coli (E. coli) or Helicobacter **pylori** (H. **pylori**) infection.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS

TI Enzyme inhibitors for treatment of gastrointestinal disorders caused by Helicobacter **pylori**

AN 1994:587325 CAPLUS

DN 121:187325

TI Enzyme inhibitors for treatment of gastrointestinal disorders caused by Helicobacter **pylori**

IN Wabnitz, Rudolf; Riedl, Jutta; Ansorg, Rainer; Goebell, Harald

PA Asche AG, Germany

SO Ger. Offen., 3 pp.

CODEN: GWXXBX

DT · Patent

LA German

FAN.CNT 1

ran.	PATENT NO.	KIND DATE	APPLICATION NO. DAT	re .
PI		A1 19940825		930219
	WO 9418964	A1 19940901	WO 1994-EP523 199	940218
	W: AU, CA,	FI, HU, JP, NO, US		
	RW: AT, BE,	CH, DE, DK, ES, FR,	GB, GR, IE, IT, LU, MG	C, NL, PT, SE
			DE 1993-4305536A 199	
	AU 9462053	A1 19940914	AU 1994-62053 199	940218
			DE 1993-4305536A 199	930219
			WO 1994-EP523 W 199	940218
	EP 804184	A1 19971105	EP 1994-909036 199	940218
	R: AT, BE,	CH, DE, DK, ES, FR,	GB, GR, IT, LI, LU, NI	L, SE, PT, IE
			DE 1993-4305536A 199	930219
	•		WO 1994-EP523 W 199	940218
	JP 2002515002	T2 20020521	JP 1994-518670 199	940218
			DE 1993-4305536A 199	930219
			WO 1994-EP523 W 199	940218
	WO 9614068	A1 19960517	WO 1994-EP3669 199	941107

W: AT, CA, FI, HU, JP, NO, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
DE 1993-4305536 19930219

AB Enzyme inhibitors, esp. protease inhibitors such as .omega.guanidinocarboxylic acid esters, are useful for treatment of H.
pylori-assocd. gastrointestinal disorders. Thus, soft gelatin
capsules contained camostat 100.00, soybean lecithin 5.00,
2,6-di-tert-butyl-4-methylphenol (antioxidant) 0.1, and peanut oil to
800.00 mg.

=> d 18 2 it

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS

IT Carboxylic acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(guanidino, esters, Helicobacter pylori-assocd. digestive
disorder treatment with)

IT Campylobacter pyloridis
(infection with, digestive disorder from, treatment of, with proteinase

inhibitors)

IT Enzymes

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors, Helicobacter pylori-assocd. digestive disorder treatment with)

IT Digestive tract

(disease, infection, with Helicobacter pylori, treatment of, with proteinase inhibitors)

IT Onium compounds

RL: BIOL (Biological study)

(guanidinium, carboxy, Helicobacter **pylori**-assocd. digestive disorder treatment with)

IT 6659-35-4D, .epsilon.-Guanidinocaproic acid, esters 16060-65-4D, p-Guanidinobenzoic acid, esters 37205-61-1, Proteinase inhibitor 39492-01-8, Gabexate 59721-28-7, Camostat 71079-09-9, FOY 251 81525-10-2, Nafamostat RL: BIOL (Biological study)

(Helicobacter **pylori**-assocd. digestive disorder treatment with)

=> 59721-28-7

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L10 82 L9

=> display hitstr ENTER (L10), L# OR ?:110 ENTER ANSWER NUMBER OR RANGE (1):1-5 L10 ANSWER 1 OF 82 CAPLUS COPYRIGHT 2003 ACS

IT **59721-28-7**, Camostat

RL: BSU (Biological study, unclassified); BIOL (Biological study) (development of camostat mesilate troche for prevention of mucositis

in

mouth during cancer chemotherapy (Erratum))

RN 59721-28-7 CAPLUS

CN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-, 2-(dimethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

L10 ANSWER 2 OF 82 CAPLUS COPYRIGHT 2003 ACS

IT **59721-28-7**, Camostat

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(trypsin inhibitor camostat has different effects on pancreas between cholecystokinin-A receptor gene knockout and wild-type mice)

RN 59721-28-7 CAPLUS

CN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-, 2-(dimethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & \text{NH} & & & \\ & \text{H}_2\text{N}-\text{C}-\text{NH} & & & \\ \end{array}$$

L10 ANSWER 3 OF 82 CAPLUS COPYRIGHT 2003 ACS

IT 59721-28-7, Camostat

RL: BSU (Biological study, unclassified); BIOL (Biological study) (metabolite; development of camostat mesilate troche for prevention of mucositis in mouth during cancer chemotherapy)

RN 59721-28-7 CAPLUS

CN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-, 2-(dimethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ NH & & & \\ H_2N-C-NH & & & \\ \end{array}$$

L10 ANSWER 4 OF 82 CAPLUS COPYRIGHT 2003 ACS

IT **59721-28-7**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (fish feed contg. proteinase inhibitors)

RN 59721-28-7 CAPLUS

CN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-, 2-(dimethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

L10 ANSWER 5 OF 82 CAPLUS COPYRIGHT 2003 ACS

IT **59721-28-7**, Camostat

RL: PEP (Physical, engineering or chemical process); PRP (Properties);

THU

(Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (prepn. and characterization of biodegradable or enteric-coated microspheres contg. the protease inhibitor camostat)

RN 59721-28-7 CAPLUS

CN Benzeneacetic acid, 4-[[4-[(aminoiminomethyl)amino]benzoyl]oxy]-, 2-(dimethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & \\ NH & & & & \\ H_2N-C-NH & & & & \\ \end{array}$$

=> logoff hold COST IN U.S. DOLLARS

SINCE FILE TOTAL

FULL ESTIMATED COST

ENTRY SESSION 13.16 179.28

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY SESSION 0.00 -1.30

CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 12:40:34 ON 03 JUN 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1623paz

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * * SESSION RESUMED IN FILE 'CAPLUS' AT 12:42:25 ON 03 JUN 2003 FILE 'CAPLUS' ENTERED AT 12:42:25 ON 03 JUN 2003 COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	13.16	179.28
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
•	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-1.30
=> file reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	13.58	179.70
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-1.30

FILE 'REGISTRY' ENTERED AT 12:42:50 ON 03 JUN 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 1 JUN 2003 HIGHEST RN 523977-56-2 DICTIONARY FILE UPDATES: 1 JUN 2003 HIGHEST RN 523977-56-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting ${\tt SmartSELECT}$ searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties

in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>

Uploading 09975136 before allowance.str

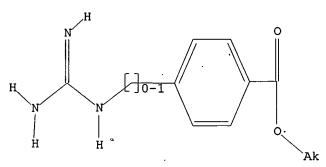
L11 STRUCTURE UPLOADED

=> d 111

L11 HAS NO ANSWERS

L11

STR



G1 H, Cb, Ak

Structure attributes must be viewed using STN Express query preparation.

=> search l11 sss sam

SAMPLE SEARCH INITIATED 12:43:23 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 208 TO ITERATE

. 100.0% PROCESSED 208 ITERATIONS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 3295 TO 5025

PROJECTED ANSWERS: 9 TO 360

L12 9 SEA SSS SAM L11

=> d scan

L12 9 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, p-[3-[m-(3-propyl-2-thioureido)phenyl]guanidino]-, methyl
 ester, monohydrochloride (8CI)

9 ANSWERS

MF C19 H23 N5 O2 S . Cl H

● HCl

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>

=>

Uploading 09975136 before allowance.str

L13 STRUCTURE UPLOADED

=> d 113

L13 HAS NO ANSWERS

L13

$$\begin{array}{c|c} & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

G1 H, Cb, Ak

Structure attributes must be viewed using STN Express query preparation.

=> search 113 sss sam

SAMPLE SEARCH INITIATED 12:45:00 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 208 TO ITERATE

100.0% PROCESSED 208 ITERATIONS

- -· -----

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

3295 TO 5025

9 ANSWERS

PROJECTED ANSWERS:

9 TO 360

L14

9 SEA SSS SAM L13

=> d scan

REGISTRY COPYRIGHT 2003 ACS 9 ANSWERS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 2-phenylethyl ester,

mononitrate (9CI)

MF C16 H17 N3 O2 . H N O3

> CM 1

$$\begin{array}{c} O \\ \parallel \\ C-O-CH_2-CH_2-Ph \\ \parallel \\ H_2N-C-NH \end{array}$$

CM

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):8

REGISTRY COPYRIGHT 2003 ACS L14 9 ANSWERS

Benzoic acid, 4,4'-[(1,3,12,14-tetraimino-2,4,11,13-tetraazatetradecane-IN 1,14-diyl)diimino]bis-, dipentyl ester, dihydrochloride (9CI)

MF C34 H52 N10 O4 . 2 Cl H

L14 9 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Benzoic acid, 4-[(aminoiminomethyl)amino]-,
3-(4,5-dimethoxy-2-methyl-3,6dioxo-1,4-cyclohexadien-1-yl)propyl ester (9CI)
MF C20 H23 N3 O6

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 9 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Benzoic acid, p-[3-[m-(3-propyl-2-thioureido)phenyl]guanidino]-, methyl
 ester, monohydrochloride (8CI)
MF C19 H23 N5 O2 S . Cl H

● HCl

L14 9 ANSWERS REGISTRY COPYRIGHT 2003 ACS

MF C19 H23 N3 O2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 9 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, hexyl ester (9CI)

MF C14 H21 N3 O2

CI COM

$$\begin{array}{c|c} \text{O} & \text{O} \\ \text{II} & \text{C-O-(CH}_2)_5\text{-Me} \\ \text{H}_2\text{N}-\text{C-NH} & \text{O} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 9 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[[imino[(4-phenyl-2-thiazolyl)amino]methyl]amino]-,
methyl

ester (9CI)

MF C18 H16 N4 O2 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 9 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 2,2-dimethylpropyl ester (9CI)
MF C13 H19 N3 O2

$$\begin{array}{c} \text{O} \\ \text{C-O-CH}_2\text{-CMe}_3 \\ \text{H}_2\text{N-C-NH} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 9 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzoic acid, 4-[[[(3-chlorophenyl)amino]iminomethyl]amino]-, butyl ester (9CI).

MF C18 H20 Cl N3 O2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

```
NYL)OXY)CARBONYL)METHYLAMINO)CARBONYL)AMINO)SULFONYL)AMINO)-
                    , ETHYL ESTER/CN
                    BENZOIC ACID,
             1
4-((((((((2,3,4-TRICHLOROPHENYL)THIO)ACETYL)OXY
                    ) ACETYL) AMINO) METHYL) -, METHYL ESTER/CN
             1
                    BENZOIC ACID,
4-((((((((3.BETA.)-17-OXOANDROST-5-EN-3-YL)AMIN
                    O) CARBONYL) OXY) METHYL) AMINO) -, 2- (DIETHYLAMINO) ETHYL
ESTER/C
                   N
                   BENZOIC ACID,
4-(((((((3.BETA.)-17-OXOANDROST-5-EN-3-YL)OXY)
                   METHYL) THIO) METHYL) AMINO) -, 2-(DIMETHYLAMINO) ETHYL ESTER/CN
                    BENZOIC ACID,
4-(((((((3.BETA.,17.BETA.)-3-HYDROXYANDROST-5-
                    EN-17-YL) AMINO) CARBONYL) OXY) METHYL) AMINO) -,
2-(DIETHYLAMINO)
                    ETHYL ESTER/CN
                    BENZOIC ACID,
4-(((((((4-BROMO-8-CHLORO-1-NAPHTHALENYL)THIO)
                   ACETYL) OXY) ACETYL) AMINO) METHYL) -, METHYL ESTER/CN
             1
                    BENZOIC ACID,
4-(((((((4-CHLOROPHENYL)AMINO)CARBONYL)HYDRAZO
                   NO) PHENYLMETHYL) THIO) METHYL) -, 1,1-DIMETHYLETHYL ESTER/CN
                    BENZOIC ACID,
4-((((((((4-CHLOROPHENYL)SULFONYL)AMINO)PHENYLM
                    ETHYLENE) AMINO) THIOXOMETHYL) AMINO) -/CN
                    BENZOIC ACID,
             1
4-(((((((4-METHOXYPHENYL)SULFONYL)(PHENYLMETHY
                   L) AMINO) ACETYL) AMINO) OXY) DIPHENYLMETHYL) -/CN
=> e Benzoic acid, 4-((aminoiminomethyl)amino)-, 2,2-dimethylpropyl ester/cn
                    BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-, 1-NAPHTHALENYL
E1
             1
Ε
                    STER, METHANESULFONATE/CN
E2
                    BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-, 1-NAPHTHALENYL
Ε
                    STER, MONONITRATE/CN
             1 --> BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-,
2,2-DIMETHYLPROP
                    YL ESTER/CN
                    BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-,
2,3-DIFLUOROPHEN
                    YL ESTER/CN
                    BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-,
E5
2.3-DIFLUOROPHEN
                    YL ESTER, MONOACETATE/CN
                    BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-,
2,3-DIMETHOXYPHE
                    NYL ESTER, MONOHYDROCHLORIDE/CN
                    BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-,
2,3-DIMETHYLPHEN
                    YL ESTER/CN
                    BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-,
2,3-DIMETHYLPHEN
                   YL ESTER, MONOMETHANESULFONATE/CN
                    BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-,
E9
             1
2,4-DINITROPHENY
```

L ESTER/CN

E10 1 BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-,

2,5-DICHLOROPHEN

YL ESTER/CN

E11 1 BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-,

2,5-DICHLOROPHEN

YL ESTER, MONOMETHANESULFONATE/CN

E12 1

BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-,

2,6-DICHLORO-4-N

ITROPHENYL ESTER/CN

=> e3

L15 1 "BENZOIC ACID, 4-((AMINOIMINOMETHYL)AMINO)-,

2,2-DIMETHYLPROPYL

ESTER"/CN

=> d 115

L15 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 282718-30-3 REGISTRY

CN Benzoic acid, 4-[(aminoiminomethyl)amino]-, 2,2-dimethylpropyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H19 N3 O2

SR CA

LC STN Files: CA, CAPLUS

$$\begin{array}{c|c} & \circ \\ & || \\ & C-O-CH_2-CMe_3 \\ \\ & H_2N-C-NH \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST

8.70
188.40

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE
0.00 -1.30

FILE 'CAPLUS' ENTERED AT 12:46:56 ON 03 JUN 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Jun 2003 VOL 138 ISS 23 FILE LAST UPDATED: 2 Jun 2003 (20030602/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 115

L16

1 L15

=> d l16 ti fbib abs

L16 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS

TI (4-aminomethyl)phenylguanidine derivatives as nonpeptidic highly selective

inhibitors of human urokinase

AN 2000:341443 CAPLUS

DN 133:99075

TI (4-aminomethyl)phenylguanidine derivatives as nonpeptidic highly selective

inhibitors of human urokinase

AU Sperl, Stefan; Jacob, Uwe; De Prada, Nuria Arroyo; Sturzebecher, Jorg; Wilhelm, Olaf G.; Bode, Wolfram; Magdolen, Viktor; Huber, Robert; Moroder,

Luis

CS Max-Planck-Institut fur Biochemie, Martinsried, 82152, Germany

SO Proceedings of the National Academy of Sciences of the United States of America (2000), 97(10), 5113-5118 CODEN: PNASA6; ISSN: 0027-8424

PB National Academy of Sciences

DT Journal

LA English

AB Increased expression of the serine protease urokinase-type plasminogen activator (uPA) in tumor tissues is highly correlated with tumor cell migration, invasion, proliferation, progression, and metastasis. Thus inhibition of uPA activity represents a promising target for antimetastatic therapy. So far, only the x-ray crystal structure of uPA inactivated by H-Glu-Gly-Arg-chloromethylketone has been reported, thus limited data are available for a rational structure-based design of uPA inhibitors. Taking into account the trypsin-like arginine specificity of uPA, (4-aminomethyl)phenylguanidine was selected as a potential P1

residue

and iterative derivatization of its amino group with various hydrophobic residues, and structure-activity relationship-based optimization of the spacer in terms of hydrogen bond acceptor/donor properties led to N-(1-adamanty1)-N'-(4-guanidinobenzy1) urea as a highly selective

nonpeptidic uPA inhibitor. The x-ray crystal structure of the uPA

complexed with this inhibitor revealed a surprising binding mode consisting of the expected insertion of the phenylguanidine moiety into the S1 pocket, but with the adamantyl residue protruding toward the hydrophobic S1' enzyme subsite, thus exposing the ureido group to hydrogen-bonding interactions. Although in this enzyme-bound state the inhibitor is crossing the active site, interactions with the catalytic residues Ser-195 and His-57 are not obsd., but their side chains are spatially displaced for steric reasons. Compared with other trypsin-like serine proteases, the S2 and S3/S4 pockets of uPA are reduced in size because of the 99-insertion loop. Therefore, the peculiar binding mode

οf

the new type of uPA inhibitors offers the possibility of exploiting optimized interactions at the 51'/S2' subsites to further enhance selectivity and potency. Because crystals of the uPA/benzamidine complex allow inhibitor exchange by soaking procedures, the structure-based on

of new generations of uPA inhibitors can rely on the assistance of x-ray anal.

RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff hold		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	4.50	192.90
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.65	-1.95

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 12:50:12 ON 03 JUN 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1623paz

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America "Ask CAS" for self-help around the clock NEWS 2 Jun 03 New e-mail delivery for search results now available NEWS 3 PHARMAMarketLetter(PHARMAML) - new on STN NEWS 4 Aug 08 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE) NEWS now available on STN Sequence searching in REGISTRY enhanced NEWS Aug 26

```
NEWS
         Sep 03
                 JAPIO has been reloaded and enhanced
         Sep 16
                 Experimental properties added to the REGISTRY file
NEWS
         Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 9
NEWS 10
         Oct 01
                 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 11
         Oct 24 BEILSTEIN adds new search fields
NEWS 12 Oct 24 Nutraceuticals International (NUTRACEUT) now available on
STN
         Nov 18 DKILIT has been renamed APOLLIT
NEWS 13
NEWS 14 Nov 25 More calculated properties added to REGISTRY
NEWS 15 Dec 04 CSA files on STN
                 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 16 Dec 17
                 TOXCENTER enhanced with additional content
NEWS 17 Dec 17
NEWS 18 Dec 17 Adis Clinical Trials Insight now available on STN
NEWS 19 Jan 29
                 Simultaneous left and right truncation added to COMPENDEX,
                 ENERGY, INSPEC
                 CANCERLIT is no longer being updated
NEWS 20
        Feb 13
         Feb 24
                 METADEX enhancements
NEWS 21
NEWS 22
                 PCTGEN now available on STN
         Feb 24
NEWS 23
         Feb 24
                 TEMA now available on STN
NEWS 24
         Feb 26 NTIS now allows simultaneous left and right truncation
         Feb 26
                 PCTFULL now contains images
NEWS 25
NEWS 26 Mar 04
                 SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 27
         Mar 20
                 EVENTLINE will be removed from STN
NEWS 28
         Mar 24
                 PATDPAFULL now available on STN
NEWS 29
         Mar 24
                 Additional information for trade-named substances without
                 structures available in REGISTRY
                 Display formats in DGENE enhanced
NEWS 30
        Apr 11
                 MEDLINE Reload
NEWS 31
         Apr 14
                 Polymer searching in REGISTRY enhanced
NEWS 32
        Apr 17
NEWS 33 Apr 21
                 Indexing from 1947 to 1956 being added to records in
CA/CAPLUS
NEWS 34 Apr 21
                 New current-awareness alert (SDI) frequency in
                 WPIDS/WPINDEX/WPIX
NEWS 35
         Apr 28
                 RDISCLOSURE now available on STN
NEWS 36 May 05
                 Pharmacokinetic information and systematic chemical names
                 added to PHAR
NEWS 37
         May 15 MEDLINE file segment of TOXCENTER reloaded
                 Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 38
         May 15
NEWS 39 May 16 CHEMREACT will be removed from STN
NEWS 40 May 19 Simultaneous left and right truncation added to WSCA
NEWS 41 May 19 RAPRA enhanced with new search field, simultaneous left and
                 right truncation
                 Simultaneous left and right truncation added to CBNB
NEWS 42
         Jun 06
NEWS 43
         Jun 06
                 PASCAL enhanced with additional data
NEWS EXPRESS
              April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
              MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
              AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
              General Internet Information
NEWS INTER
              Welcome Banner and News Items
NEWS LOGIN
NEWS PHONE
              Direct Dial and Telecommunication Network Access to STN
NEWS WWW
              CAS World Wide Web Site (general information)
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer